

# BRUHAT BANGALORE MAHANAGARA PALIKE

## DASARAHALLI ZONE

Item of Work: Improvements of C C roads drain at Dharmastala hotel back side in Dasarahalli Ward No 15

| Description of Item |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         | Unit | No     | L    | B    | D | Est. Cost Rs | 20.00   | Lakhs    |  |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|------|------|---|--------------|---------|----------|--|
| Description of Item |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         | Unit | No     | L    | B    | D | Qty          | Rate    | Amount   |  |
| 1                   | KSRRB M200-Dismtling of existing structures like culverts, Bridges, retaining walls and other structure comprising of masonary, cement concrete, wood work,steel work, including T&P and scaffolding wherever necessary, sorting the dismanlet material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specification Lime/Cement concrete I. By Manual Means C. Prestressed /Reinforced cement concrete Grade M-20 & above (P-137, lt 18.19) PWD SR 2016-17                                                                 |         |      |        |      |      |   |              |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cum     | 1    | 46.00  | 3.50 | 0.15 |   | 24.15        |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |      |        |      |      |   | 24.15        | 1083.32 | 26162.00 |  |
|                     | Basic Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1022.00 |      |        |      |      |   |              |         |          |  |
|                     | Add Area Weightage 6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 61.32   |      |        |      |      |   |              |         |          |  |
|                     | Total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1083.32 |      |        |      |      |   |              |         |          |  |
| 2                   | KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in Ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications. MORTH Chapter 3 (P.142/L.19.1 PW, P & I WTD -SR 2016-17)                                                                                                                        |         |      |        |      |      |   |              |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cum     | 1    | 140.00 | 3.00 | 0.30 |   | 126.00       |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         | 1    | 153.00 | 1.20 | 0.80 |   | 146.88       |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |      |        |      |      |   | 272.88       | 86.92   | 23719.00 |  |
|                     | Basic Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 82.00   |      |        |      |      |   |              |         |          |  |
|                     | Add Area Weightage 6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.92    |      |        |      |      |   |              |         |          |  |
|                     | Total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 86.92   |      |        |      |      |   |              |         |          |  |
| 3                   | Providing, laying, spreading and compacting graded stone aggregates to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. Specification No. 406 with all leads and lifts etc., complete as per the direction of Engineer-in-charge of the work.( PWD SR 2016-17, P.No.158, I No.20.18) |         |      |        |      |      |   |              |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cum     | 1    | 46.00  | 3.00 | 0.15 |   | 20.70        |         |          |  |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |      |        |      |      |   | 20.70        | 1768.08 | 36599.00 |  |

203

| Description of Item | Unit    | No | L | B | D | Qty | Rate | Amount |
|---------------------|---------|----|---|---|---|-----|------|--------|
| Basic Rate          | 1668.00 |    |   |   |   |     |      |        |
| Area Weightage 6%   | 100.08  |    |   |   |   |     |      |        |
| Total               | 1768.08 |    |   |   |   |     |      |        |

KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @180 kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.12/L.4.3) PWD - SR 2016-17)

|                       |         |   |        |      |      |       |         |           |
|-----------------------|---------|---|--------|------|------|-------|---------|-----------|
|                       | Cum     | 1 | 140.00 | 3.00 | 0.15 | 63.00 |         |           |
|                       |         | 1 | 153.00 | 1.20 | 0.15 | 27.54 |         |           |
|                       |         |   |        |      |      | 90.54 | 5159.02 | 467098.00 |
| Basic Rate            | 4867.00 |   |        |      |      |       |         |           |
| Add Area Weightage 6% | 292.02  |   |        |      |      |       |         |           |
| Total                 | 5159.02 |   |        |      |      |       |         |           |

5 KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications, Specification NO KBS 4.6.2 Page No 15/ Item No 4.31/PWD SR 2016-17

|                       |        |   |        |      |  |        |        |           |
|-----------------------|--------|---|--------|------|--|--------|--------|-----------|
|                       | Sqm    | 4 | 153.00 | 0.90 |  | 550.80 |        |           |
|                       |        |   |        |      |  | 550.80 | 310.58 | 171067.00 |
| Basic Rate            | 293.00 |   |        |      |  |        |        |           |
| Add Area Weightage 6% | 17.58  |   |        |      |  |        |        |           |
| Total                 | 310.58 |   |        |      |  |        |        |           |

6 KSRRB M2200-5.9. Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008- i) Upto 5 m height. (Pg.No.223, It.no.28.7.9)

|                       |         |   |        |      |      |       |         |           |
|-----------------------|---------|---|--------|------|------|-------|---------|-----------|
|                       | Cum     | 2 | 153.00 | 0.15 | 0.90 | 41.31 |         |           |
|                       |         | 1 | 153.00 | 0.90 | 0.10 | 13.77 |         |           |
| Bottom slab           |         |   |        |      |      | 55.08 | 6965.26 | 383647.00 |
| Basic Rate            | 6571.00 |   |        |      |      |       |         |           |
| Add Area Weightage 6% | 394.26  |   |        |      |      |       |         |           |
| Total                 | 6965.26 |   |        |      |      |       |         |           |

203

| Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Unit    | L | B      | D    | Qty    | Rate    | Amount    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|--------|------|--------|---------|-----------|
| Concrete pavement. Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base of 150mm 1:2:4 cement or any other type as per clause 1051.2.2 with 25mm down size graded granite metal coarse aggregates and fine aggregates, with superplasticiser @3lts confirming to IS9103-1999 (IS:2008), mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, in approved fixed side form work (steel channel, laying and fixing of 1.5mm thick polythene film, wedges, steel plates including levelling form work as per drawing). Spreading the concrete with shovels, rollers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.43cum) ((P.No.177, I.No.22.6.1 of PW,P&I WTD SR 2016-17) | Cum     | 1 | 140.00 | 3.00 | 0.12   | 50.40   |           |
| Basic Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5866.00 |   |        |      | 50.40  | 6217.96 | 313385.00 |
| Add Area Weightage 6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 351.96  |   |        |      |        |         |           |
| Total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6217.96 |   |        |      |        |         |           |
| 8 Providing groove cutting to concrete pavement for width of 5mm to 10mm and depth 80mm - 100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade, coolant, etc., including cleaning of groove & providing sand and hot bitumen fillers, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications.(P.No.178, I.No.22.8.1 of PW, P&I WTD SR 2016-17)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Rmt     | 1 | 60.00  | 4.40 |        | 264.00  |           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |   |        |      | 264.00 | 121.90  | 32182.00  |
| Basic Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 115.00  |   |        |      |        |         |           |
| Add Area Weightage 6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6.90    |   |        |      |        |         |           |
| Total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 121.90  |   |        |      |        |         |           |
| 9 Vacuum de-watering with vacuum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, screed vibratory, power Floater, blade and disc etc., with all lead and lift PWD SR 2015-16 [P.No.177 - I.No.22.7]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Sqm     | 1 | 140.00 | 4.40 |        | 616.00  |           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |   |        |      | 616.00 | 95.40   | 58766.00  |
| Basic Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90.00   |   |        |      |        |         |           |
| Add Area Weightage 6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5.40    |   |        |      |        |         |           |
| Total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 95.40   |   |        |      |        |         |           |

623

| Description of Item                                                                                                                                                                                                                                                                                                                                                              | Unit     | No   | L                   | B     | D    | Qty       | Rate     | Amount     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|---------------------|-------|------|-----------|----------|------------|
| SRB M2200-6. Supplying, fitting and placing TMT bar Fe 500 reinforcement in sub-structure complete as per drawing and Technical specifications complete as per specifications MORTH Specification o.1600 & 2200 [P. no.225 - I. no.28.8.2]                                                                                                                                       |          |      |                     |       |      |           |          |            |
| Qty Vide Item No. 01                                                                                                                                                                                                                                                                                                                                                             | Tonne    |      | 24.15               | 40.00 |      |           |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  |          | 26   | 140.00              |       |      | 966.00    |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  |          | 1400 | 2.65                |       | 0.62 | 2256.80   |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  |          |      |                     |       | 0.62 | 2300.20   |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  |          |      |                     |       |      | 5523.00   |          |            |
| Basic Rate                                                                                                                                                                                                                                                                                                                                                                       | 62719.00 |      |                     |       | Say  | 5.52      | 66482.14 | 367181.00  |
| Add 6% A.W                                                                                                                                                                                                                                                                                                                                                                       | 3763.14  |      |                     |       |      |           |          |            |
| TOTAL                                                                                                                                                                                                                                                                                                                                                                            | 66482.14 |      |                     |       |      |           |          |            |
| 11 Disposal of debris to the final place of disposal with all lead and lift and as direction by the engineer in charge of the work, lead 4 Km a) Basic rate for haulage of materials as per item No. 17.4/KSRRB : M100-4.1 ..... Rs. 2.00 Tonne/Km b) Average earth of work 1.28 Tonne/Km for Rs. 2.00/Km c) Add loading and unloading Page No. 133 Item No. 17.1 PWD SR 2016-17 |          |      |                     |       |      |           |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  | Cum      |      | Qty Vide Item No. 2 |       |      | 272.88    | 85.65    | 23372.00   |
| Loading and Unloading Charges                                                                                                                                                                                                                                                                                                                                                    | 68.00    |      |                     |       |      |           |          |            |
| Lead 4 KMs 2x1.28x4                                                                                                                                                                                                                                                                                                                                                              | 12.80    |      |                     |       |      |           |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  | 80.80    |      |                     |       |      |           |          |            |
| Add Area Weightage 6%                                                                                                                                                                                                                                                                                                                                                            | 4.85     |      |                     |       |      |           |          |            |
| Total                                                                                                                                                                                                                                                                                                                                                                            | 85.65    |      |                     |       |      |           |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  |          |      |                     |       |      | Sub Total |          | 1903178    |
| 12 Qc+Tender Premium 1+4=5%                                                                                                                                                                                                                                                                                                                                                      |          |      |                     |       |      |           |          | 95159.00   |
|                                                                                                                                                                                                                                                                                                                                                                                  |          |      |                     |       |      |           |          | 1663.00    |
| 13 Miscellaneous and Unforeseen Charges                                                                                                                                                                                                                                                                                                                                          |          |      |                     |       |      |           |          |            |
|                                                                                                                                                                                                                                                                                                                                                                                  |          |      |                     |       |      | Total     |          | 2000000.00 |

Rupees Twenty Lakhs Only

( CERTIFICATE:-

- 1 The Work spot has been inspected and the work is found to be necessary
- 2 The Estimate is prepared as per the PW,P & IWTD -SR-2016-17
- 3 The Provision made in estimate are adequate and essential.
- 4 This area comes under BBMP limits.

Assistant Engineer  
Ward No 15

Assistant Executive Engineer  
T. Dasarahalli Sub-Division  
B.B.M.P

Executive Engineer  
Dasarahalli Division  
B.B.M.P. Bangalore.

ನಂ. EE/DD/AS/565/17-18 ದಿನಾಂಕ : 29/11/17

ರೂ. RS.20.00.lakhs (Twenty lakhs only)

ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆದೇಶಾತ್ಮಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು  
ಬಿ.ಬಿ.ಎಂ.ಪಿ.ದಾಸರಾಹಳ್ಳಿ ವಿಭಾಗ  
ದಾಸರಾಹಳ್ಳಿ, ವಲಯ, ಬೆಂಗಳೂರು.

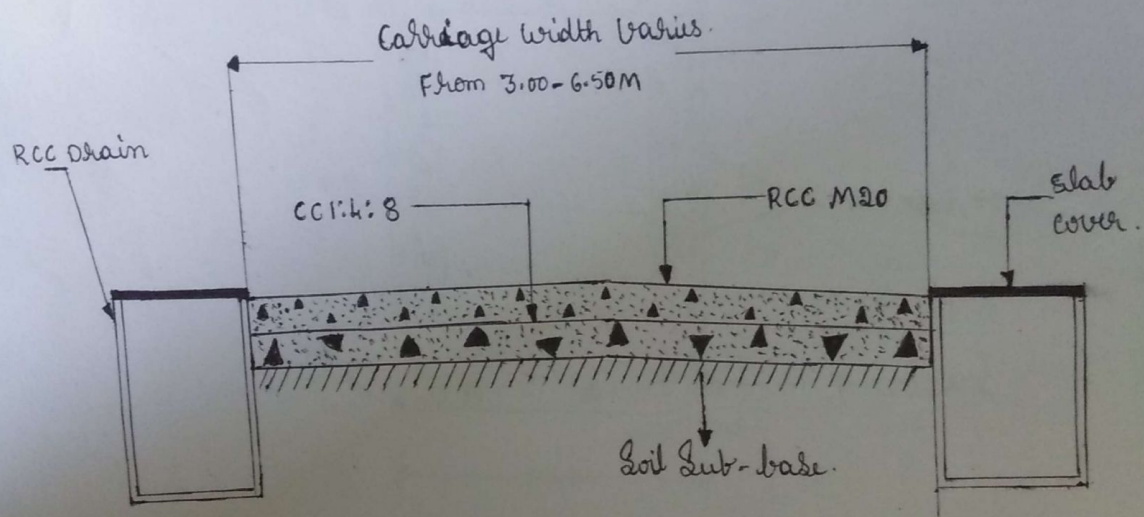
ನಂ. EE/DD/TS/406/17-18 ದಿನಾಂಕ : 30/11/17

ರೂ. RS.20.00.lakhs (Twenty lakhs only)

ಗಳ ಅಂದಾಜು ಪಟ್ಟಿಗೆ ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು  
ಬಿ.ಬಿ.ಎಂ.ಪಿ.ದಾಸರಾಹಳ್ಳಿ ವಿಭಾಗ  
ದಾಸರಾಹಳ್ಳಿ, ವಲಯ, ಬೆಂಗಳೂರು.

# Cross Section of Pavement Road



ಮುಖ್ಯಸ್ಥರು  
5 20

*Signature*  
ಮಾನ್ಯ ಮಂತ್ರಿಗಳ ಕಛೇರಿ  
ಮ.ಪಂ.ರಾಜ್ಯ ಸಾರ್ವಜನಿಕ  
ಮಾಹಿತಿ, ಸಮಾಜ  
ಕಲ್ಯಾಣ